

What is claimed is:

1. A satellite communication system operated under demand assignment multiple access system;

5 wherein a specific earth station performing line assignment control and a plurality of other earth stations are connected by a common signal channel line through a communication satellite;

10 a calling earth station demands assignment of a communication line through said common signal channel line from said specific earth station at the time of performing a communication between the earth stations including said specific earth station;

15 said specific earth station assigns a communication line in response to the demand for line assignment; and

said calling earth station and the called earth station perform a communication using said assigned communication line, and release said communication line upon completing the communication;

20 the satellite communication system being characterized in that said common signal channel line is used for transmission of data without said communication line assignment.

25 2. The satellite communication system according to claim 1, wherein said plurality of other earth stations are provided with transmission band selection means for selecting a transmission bandwidth of said common signal channel line depending on data quantity to be transmitted from said earth stations.

30 3. The satellite communication system according to claim 1, wherein said plurality of other earth stations

are provided with time slot selection means for selecting a plurality of continuous or discontinuous TDMA slots of said common signal channel line depending on data quantity to be transmitted from said earth stations.

5           4. The satellite communication system according to claim 1, wherein said plurality of other earth stations are provided with both transmission band selection means for selecting a transmission bandwidth of the common signal channel line depending on data quantity to be transmitted from said earth stations, and time slot selection means for selecting a plurality of continuous or discontinuous TDMA slots of said common signal channel line depending on the data quantity to be transmitted from said earth stations.

10           5. The satellite communication system according to claim 1, wherein in case of transmitting data to said specific earth station, said plurality of other earth stations demand transmission bandwidth and TDMA slots of the common signal channel line necessary for data transmission from said specific earth station, and said specific earth station assigns a transmission bandwidth and TDMA slots of said common signal channel line to the calling earth station to serve as exclusive communication line for said calling earth station.